

Invasive Species





Name: Cathy Buzynski

Content Area: Science

School: Prairie Creek

Extern host site: Kent State Park

Part I: General Overview of Business The Johnson County Conservation (JCC) Center, established in 1964, is responsible for managing natural resources and handling outdoor recreational activities in Johnson County. Kent Park, outside of Oxford, IA, is the central location and main priority of JCC. The 1,052 acre park contains a campground, beach, nine and one half miles of hiking trials, a youth camp ground, numerous shelters, and the Conservation Education Center.

Part II: Job Specifics

As an effort to manage natural resources, JCC focuses high emphasis on the water quality and prairies in Johnson County. Their emphasis for water includes water testing for various nutrients such as ammonia, phosphorus, nitrate, nitrite, dissolved oxygen, and pH. When it comes to prairies, JCC has narrowed it's focus to restoring the prairies to their native forms by ridding them of invasive species.

Part III: Introduce the Problem JCC needs the 5th grade students at College Community to help solve the water crisis in Kent Park by focusing their attention on restoration of prairies. The question that we will be working to solve is "How are invasive species affecting today's prairies, and how can we spread awareness?" Students will choose an invasive species to research, publicize with a brochure, and present over. Their project of the plant will include the origin, the potential negative implications, pictures and identification strategies, and management techniques.

Part IV: Background

Students need to first understand the connection between water quality and prairie life. Native prairies were self-sufficient when it came to maintaining natural ecosystems. The specific plants and root systems within those prairies absorbed nutrients that today are seeping through the system into our streams, ponds, and lakes and affecting our water quality. Students will learn about the diversity in plant species in order to then concentrate on an invasive species to research and spread awareness of it's implications.

Part V: Business Solution

Johnson County Conservation is depleting the prairies of invasive species. They are using various strategies to take out different invasives, such as, brush cutting, herbicide application, and hand pulling. Along with those strategies, the naturalist have created multiple brochures and presentations to spread awareness on the effects of invasive species. To solve the overall crisis of water quality, they are also collecting data on water quality and wetlands to be able to combine all of their information and work out one final solution.

Part VI: Student Solutions

Students will be creating a brochure that they will believe Johnson County will be using to teach others about their chosen invasive species. Students will have various solutions for how the park and others in the community can get rid of their particular invasive plant species based upon the information they research and discover about their plant. Lastly, they will also create a public service announcement that we will pretend would air on KCRG to inform others!